

ACF WaterSmart—Drought Synoptic

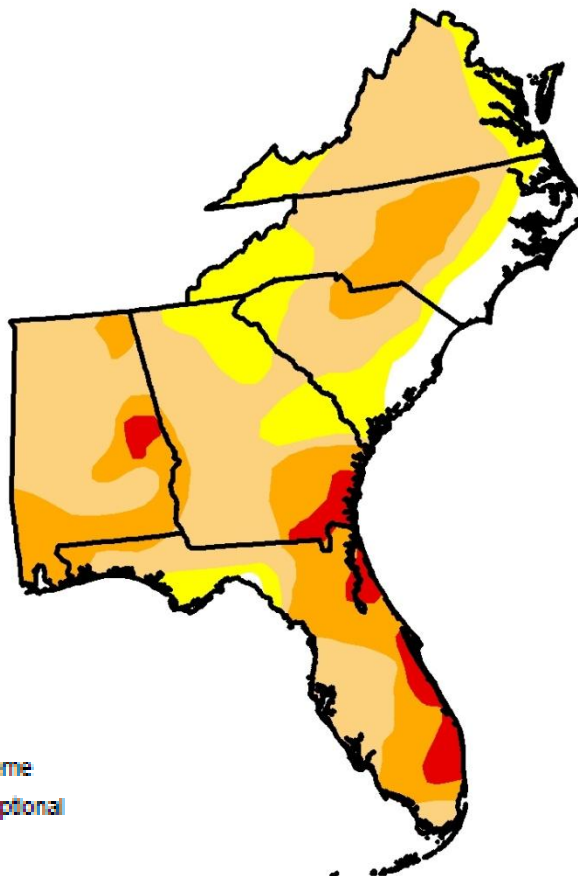
- Drought conditions in basin provided unique opportunity to characterize hydrologic conditions and ecological habitats during peak of irrigation season
- Georgia, Florida, and Alabama WSCs launched large scale effort to measure conditions during week of July 18th—
 - Streamflow and water quality
 - Groundwater levels



ACF WaterSmart—Drought Synoptic

- **Ecological habitats**
 - **During July 18th effort**
 - **field water quality parameters measured: dissolved O₂, specific conductance, pH, temperature**
 - **Water samples collected and analyzed for alkalinity**
 - **September—assess populations of fish and mussels and collect water quality samples in streams within a Piedmont and a Coastal Plain subbasin**

Drought—3/11/11



Intensity:

 D0 Abnormally Dry

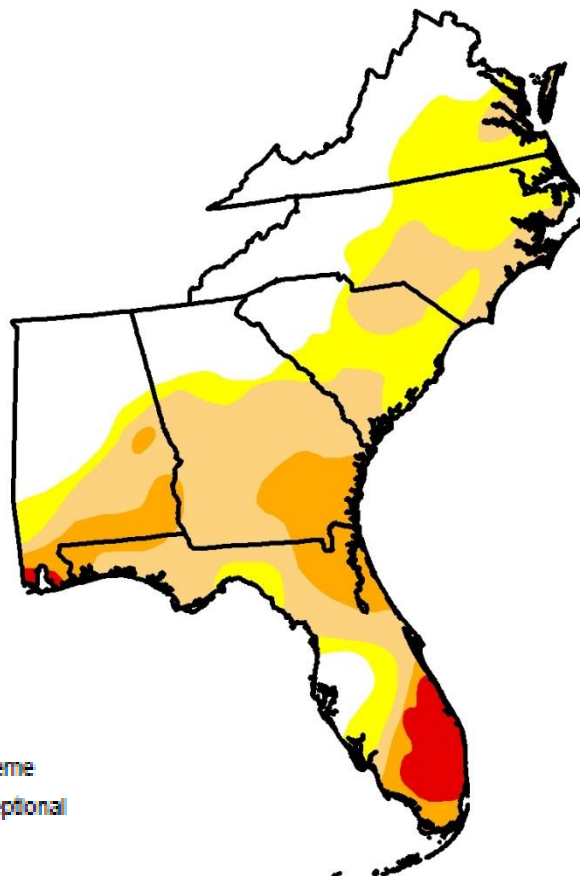
 D1 Drought - Moderate

 D2 Drought - Severe

 D3 Drought - Extreme

 D4 Drought - Exceptional

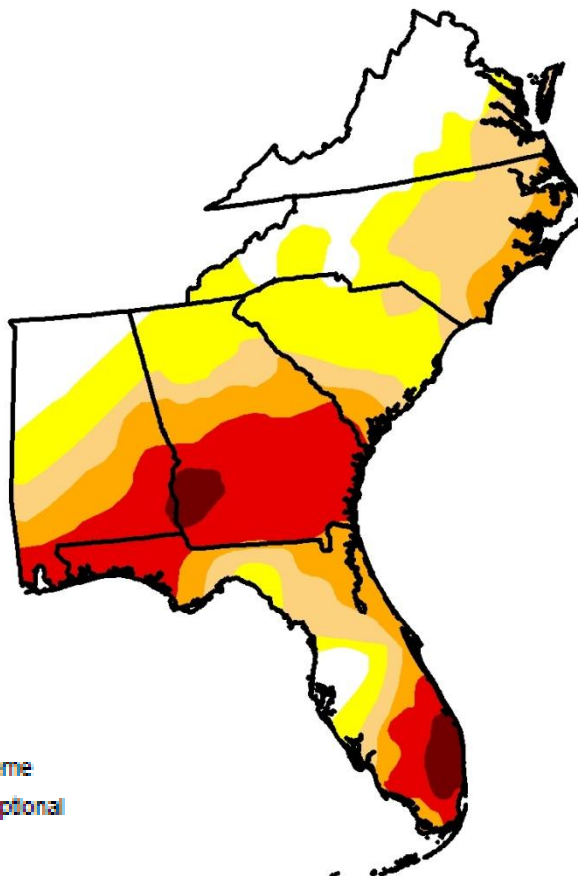
Drought—5/3/11



Intensity:



Drought—6/7/11



Intensity:

 D0 Abnormally Dry

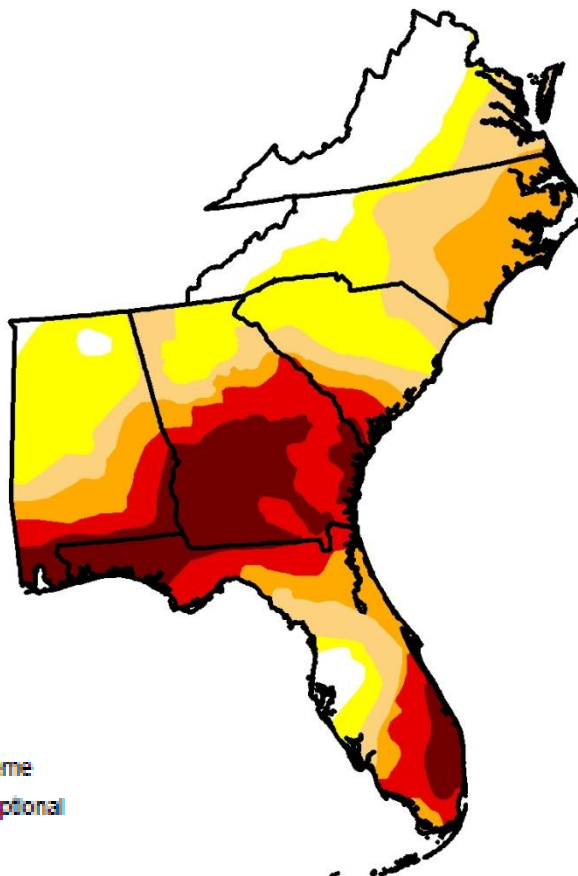
 D1 Drought - Moderate

 D2 Drought - Severe

 D3 Drought - Extreme

 D4 Drought - Exceptional

Drought—6/21/11



Intensity:

Yellow D0 Abnormally Dry

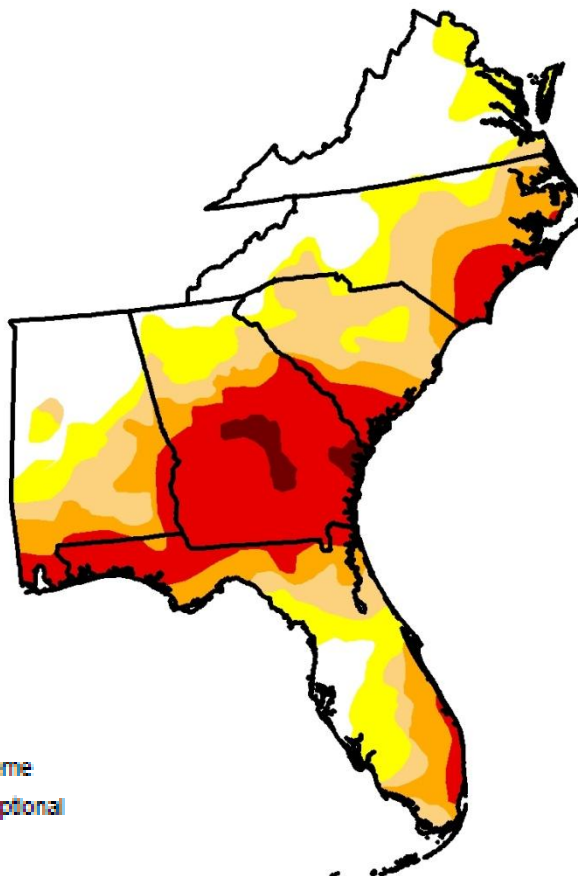
Light Orange D1 Drought - Moderate

Dark Orange D2 Drought - Severe

Red D3 Drought - Extreme

Dark Red D4 Drought - Exceptional

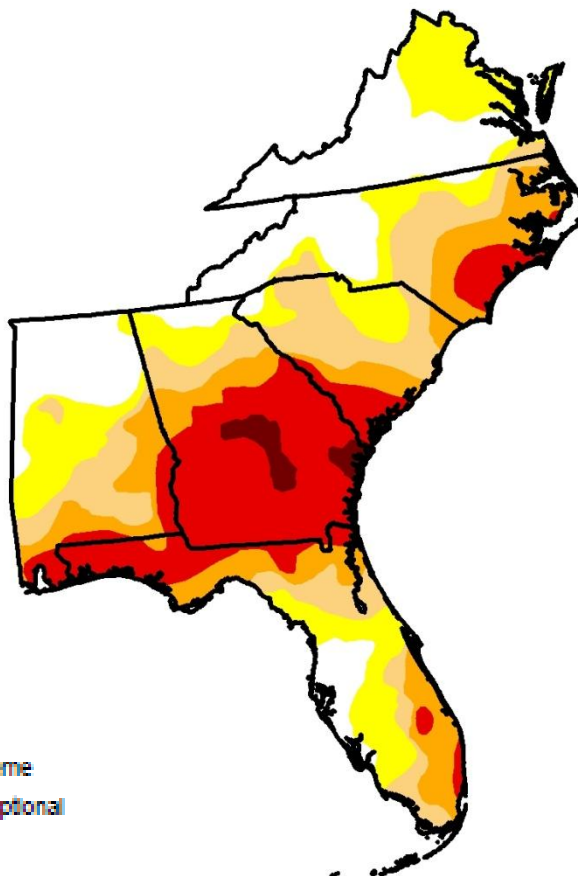
Drought—7/19/11



Intensity:



Drought—7/26/11



Intensity:

Yellow D0 Abnormally Dry

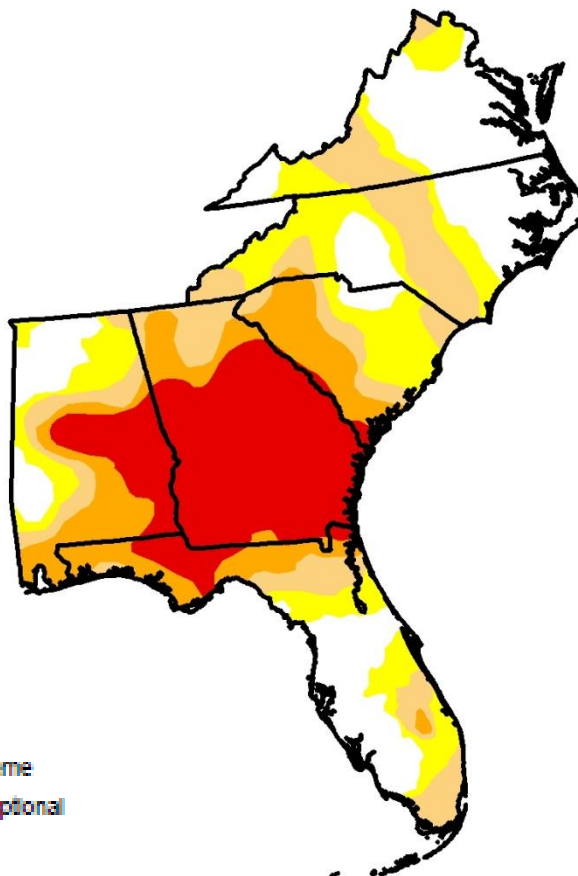
Light Orange D1 Drought - Moderate

Dark Orange D2 Drought - Severe

Red D3 Drought - Extreme

Dark Red D4 Drought - Exceptional

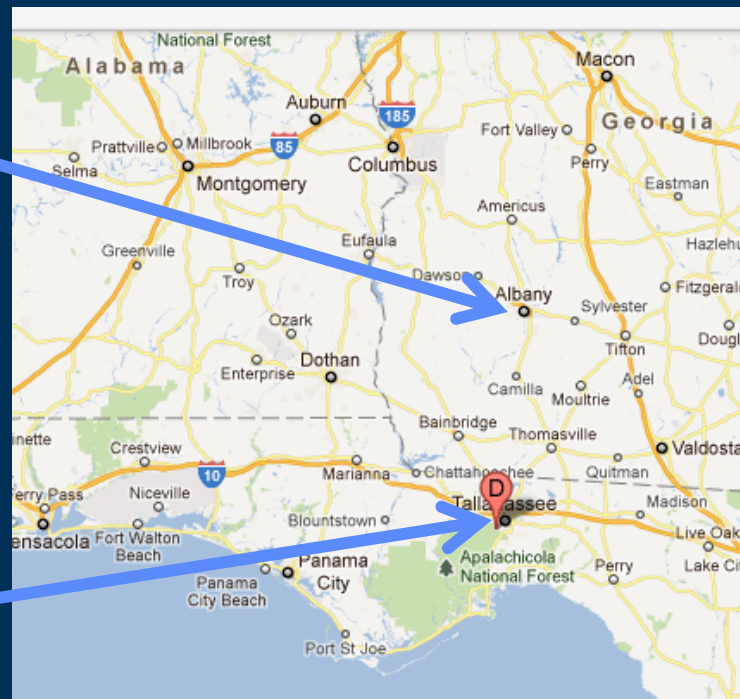
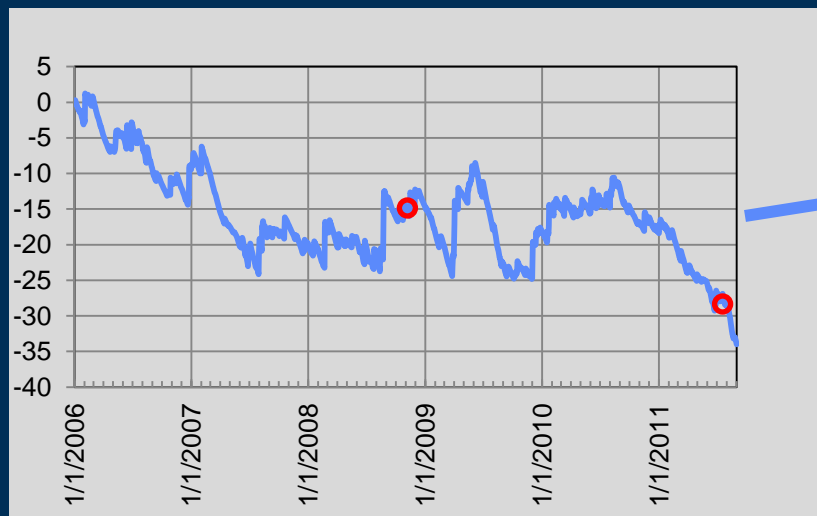
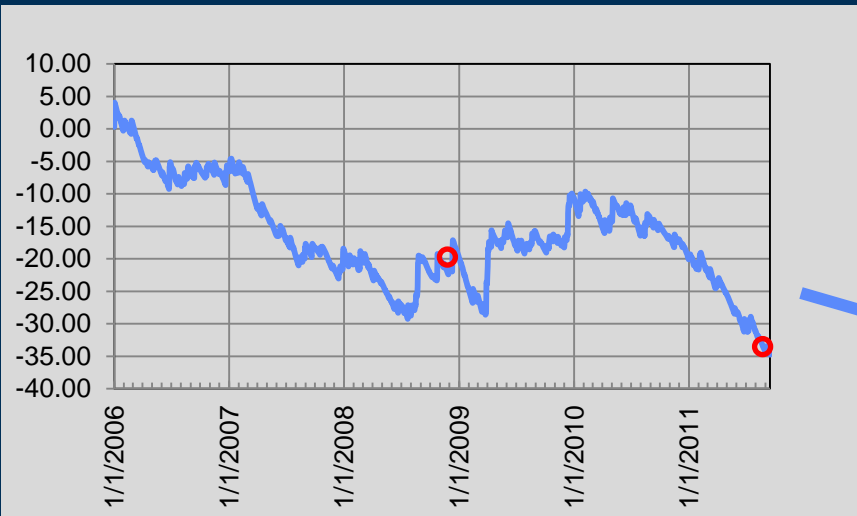
Drought—8/30/11



Intensity:

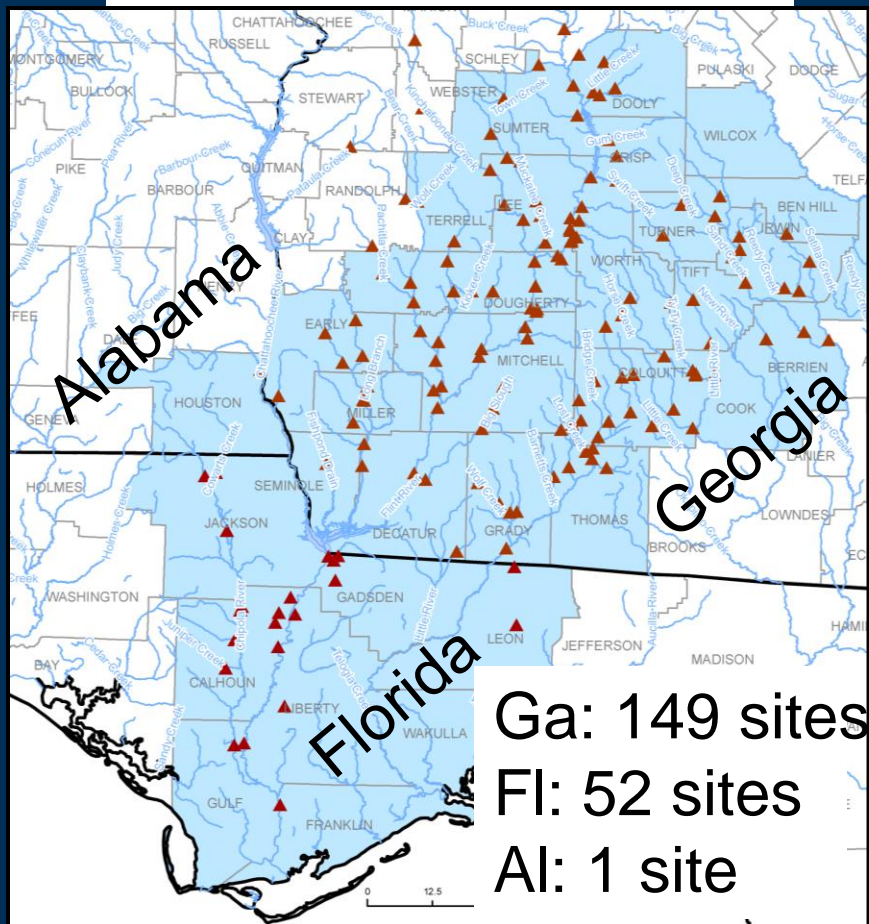


Cumulative Departure from normal precipitation

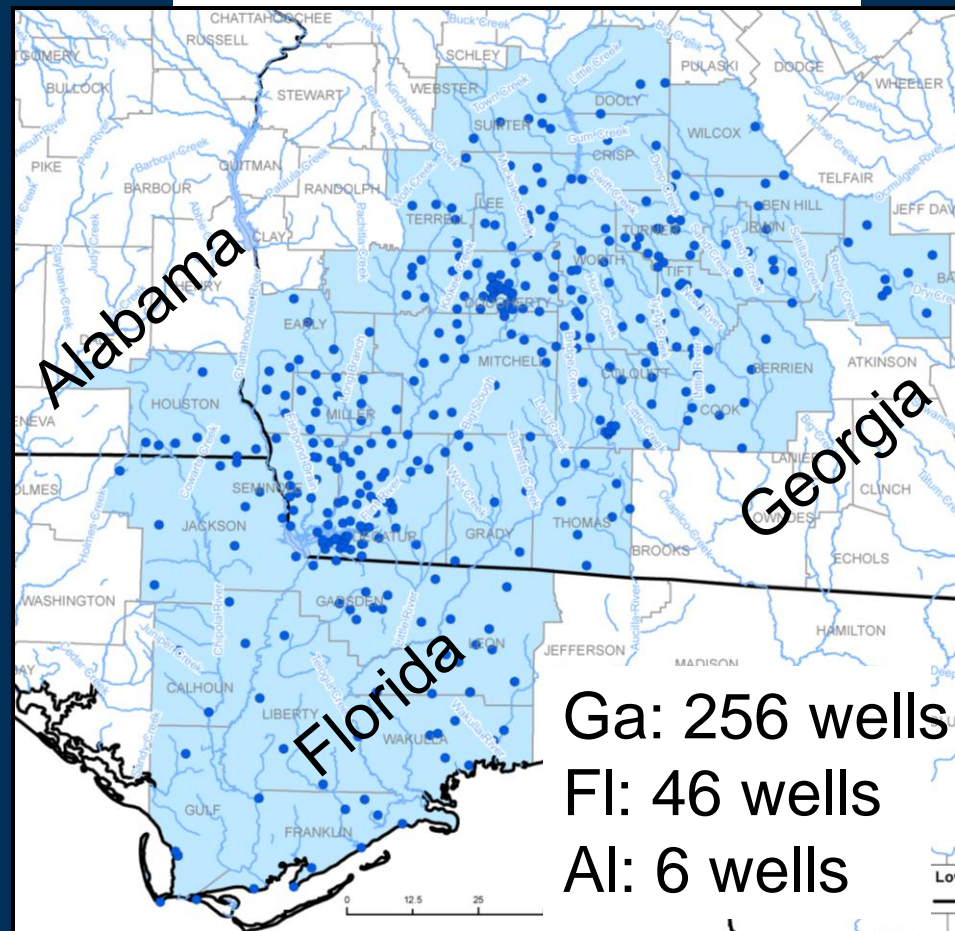


Summer 2011 Synoptic

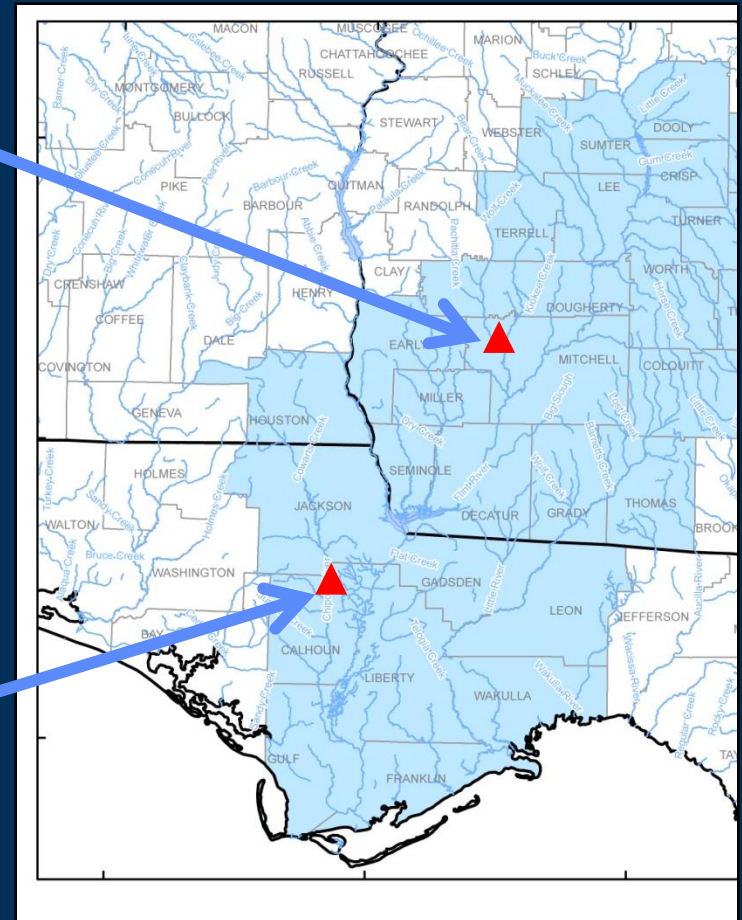
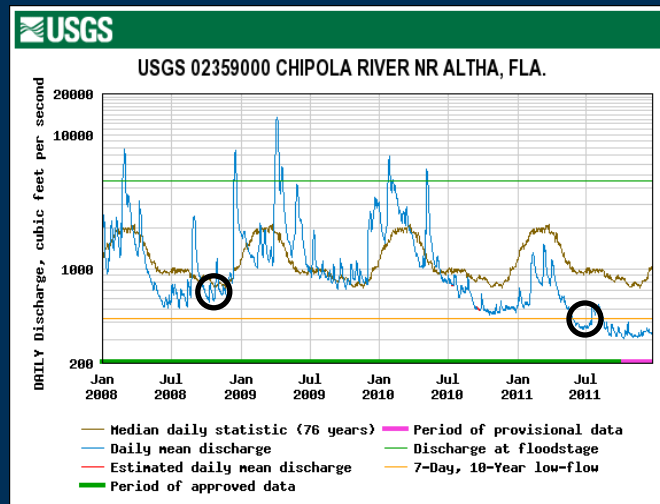
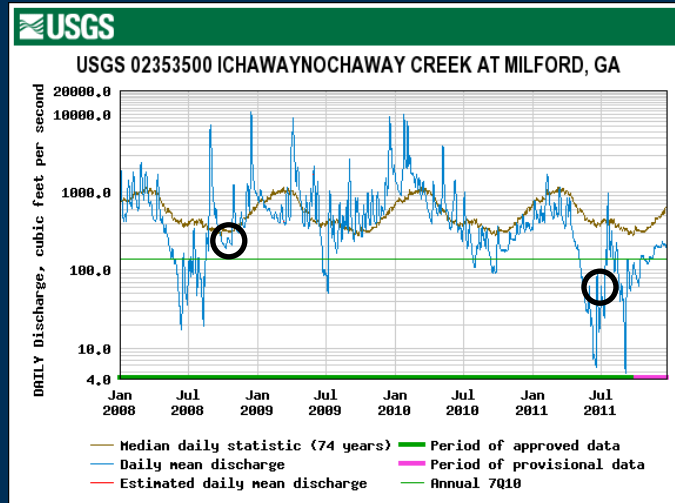
Surface water sites



Groundwater sites

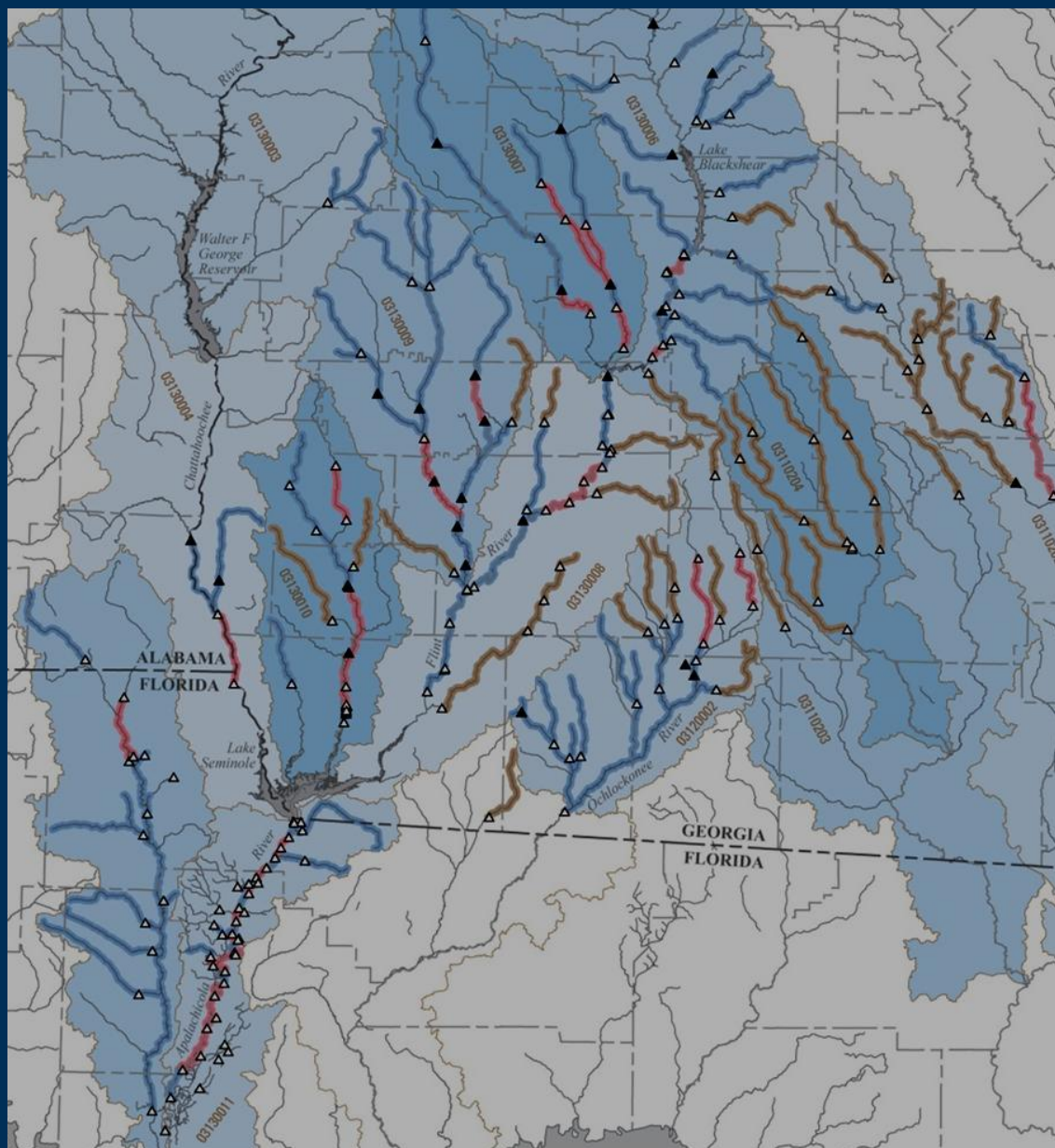


Streamflow



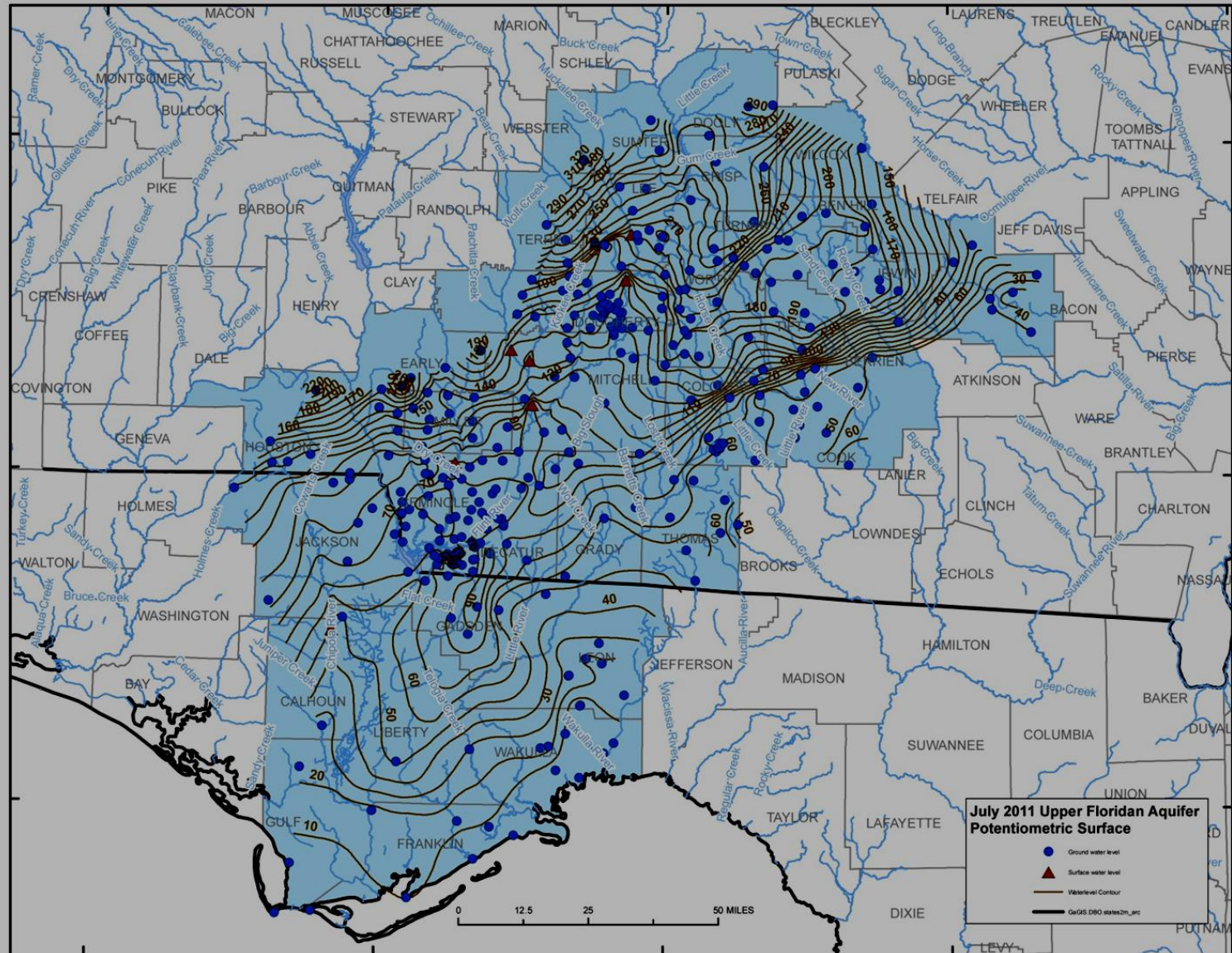
Gaining/Losing Streams July 2011

— Gaining
— Losing
— Dry

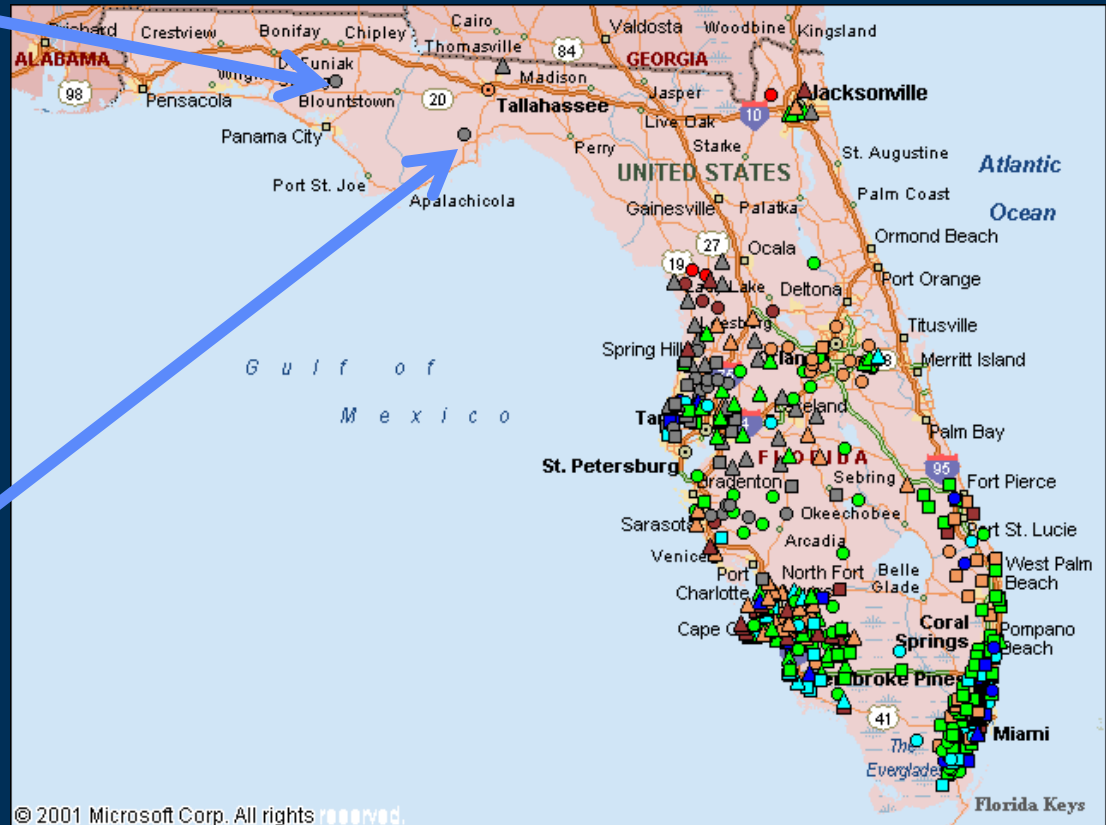
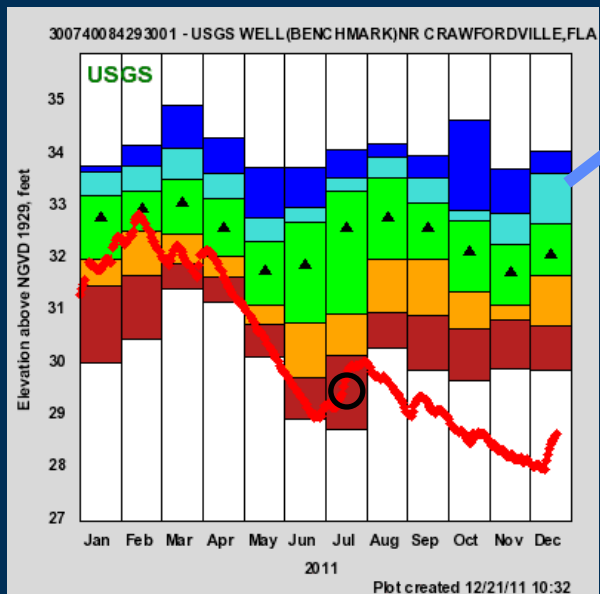
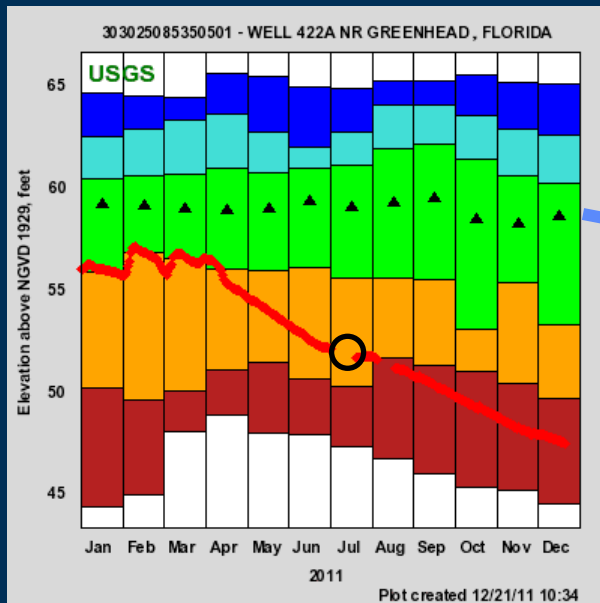


Upper Floridan Aquifer Water Levels July 2011

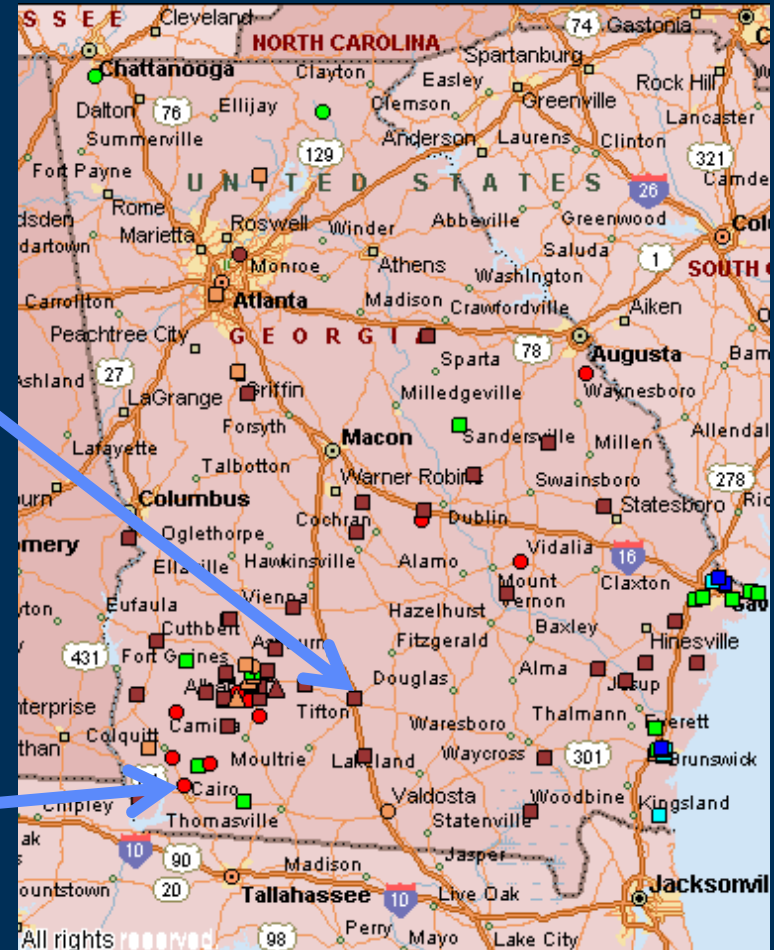
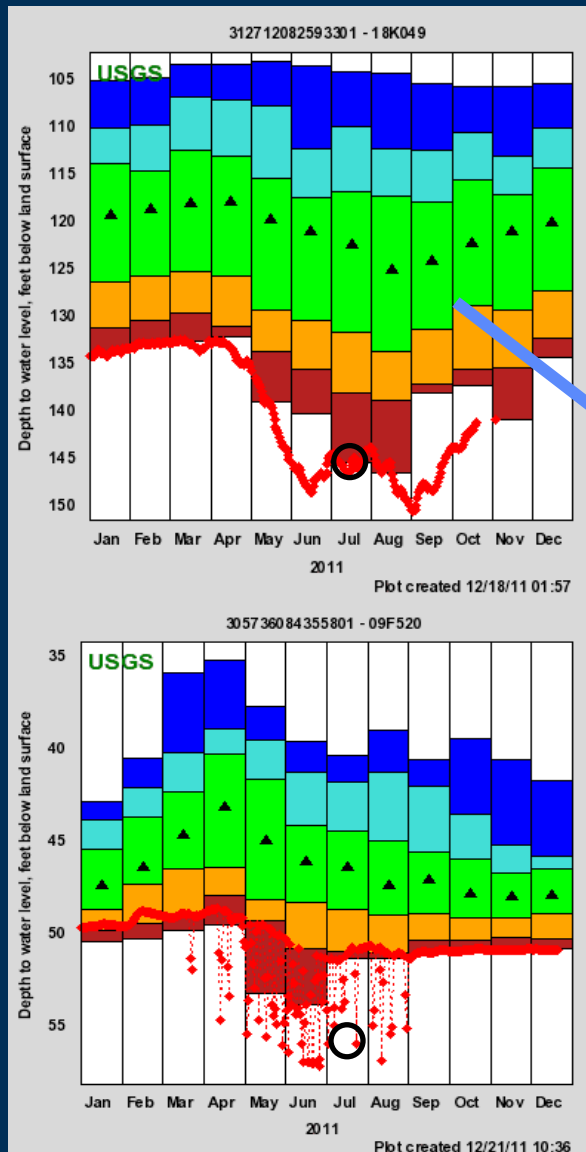
*Provisional
subject to
revision*



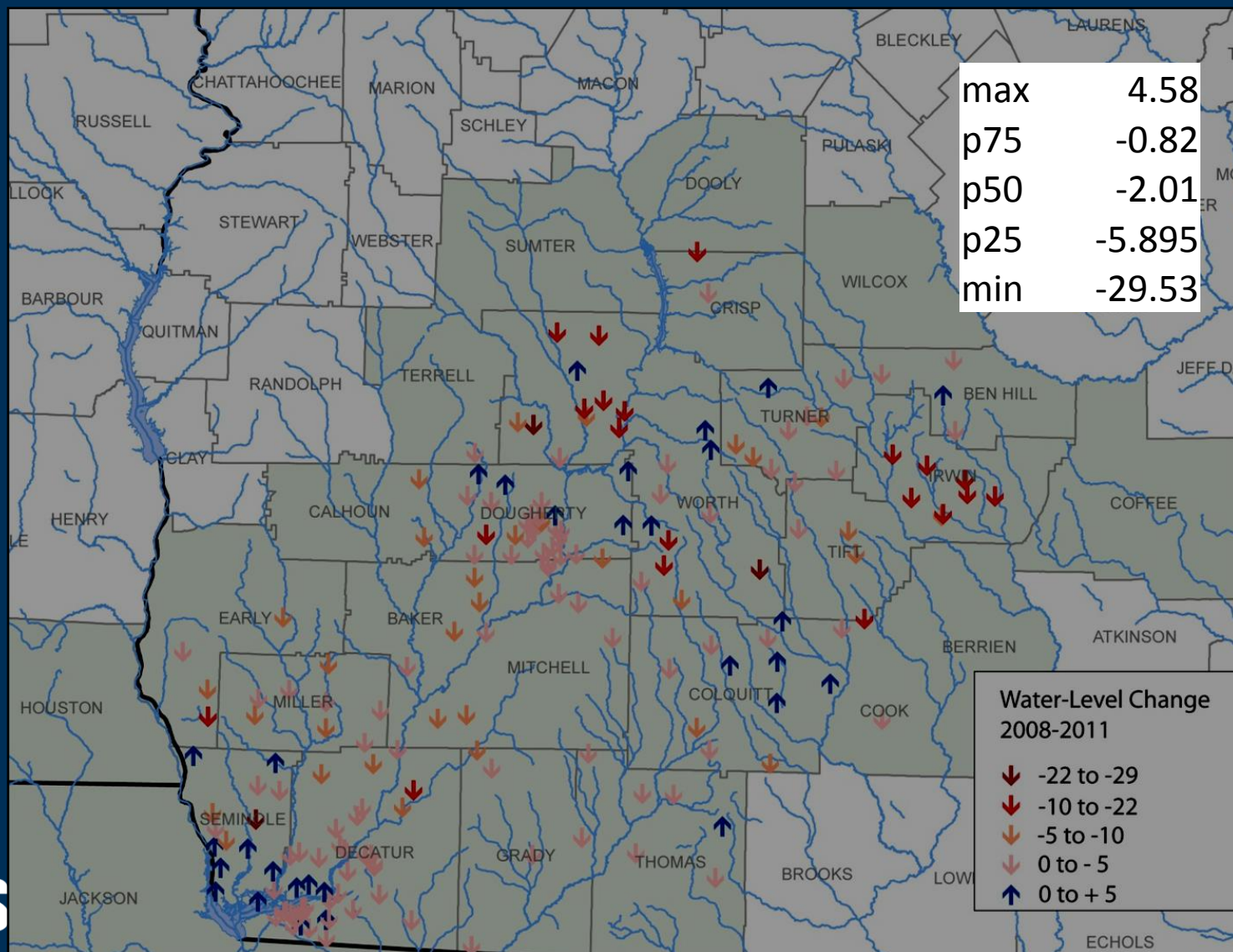
Florida wells



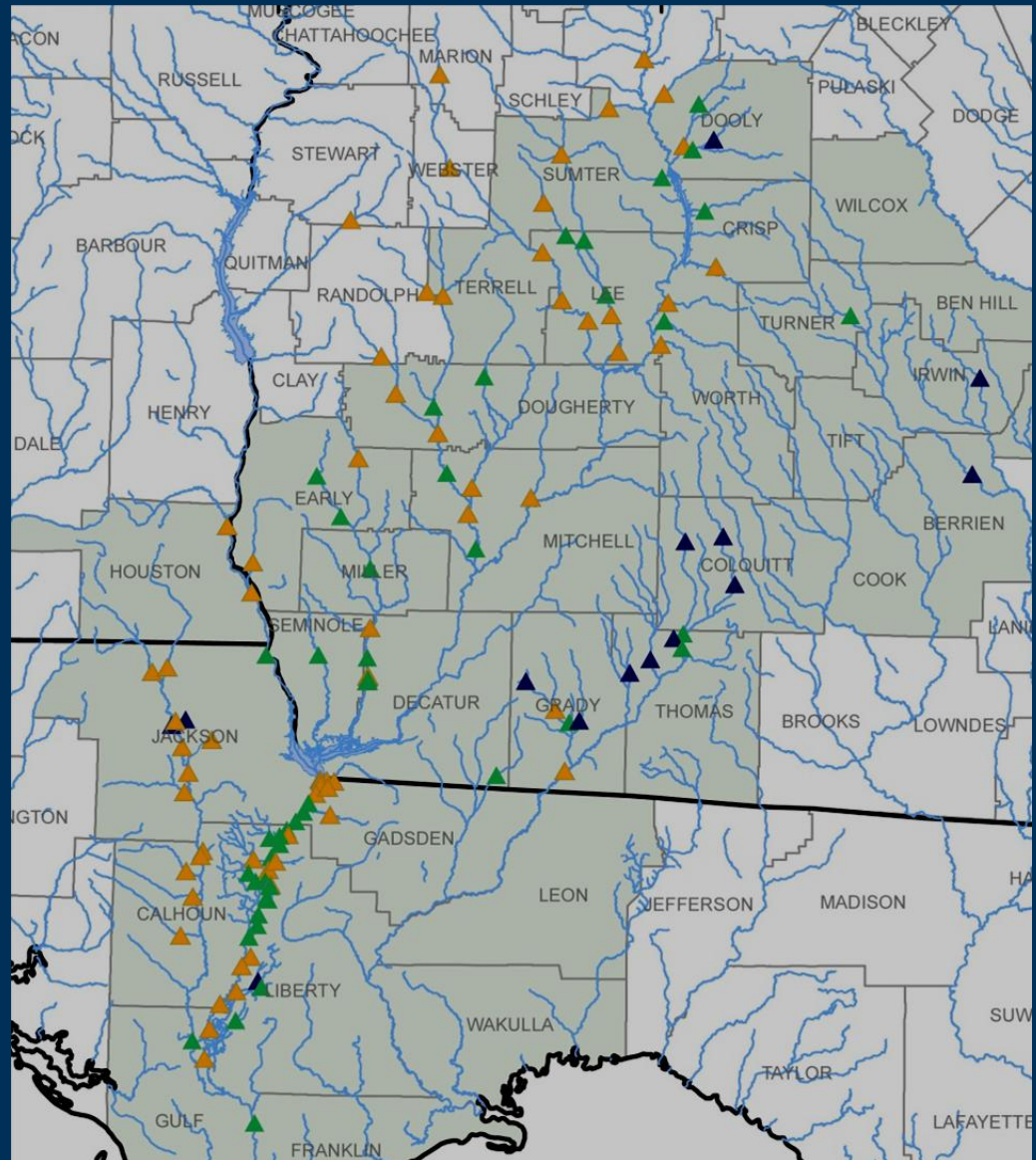
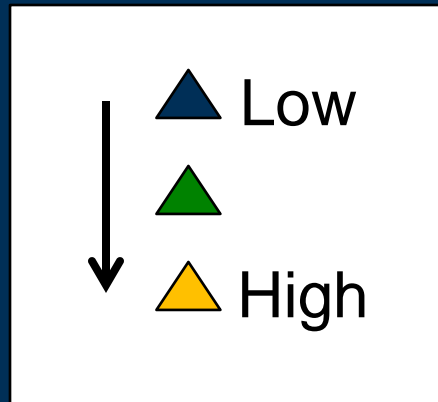
Georgia Wells



Water-Level Change 2008-2011



Stream QW—Dissolved Oxygen



Report in Preparation

- Abstract
- Introduction
 - Purpose and Scope
 - Description of the Study Area
 - Physiography
 - Hydrogeologic setting
 - Climate
 - Previous Investigations
 - Well- and Stream-Numbering Systems
- Methods
- Hydrologic, Climatic, and Stream Water Quality Conditions
 - Precipitation
 - Groundwater Levels
 - Surficial aquifer
 - Upper Floridan aquifer
 - Stream Base Flow
 - Stream Water Quality
- Summary
- Selected References

